CLASSIFICATION AND CORRELATION

OF

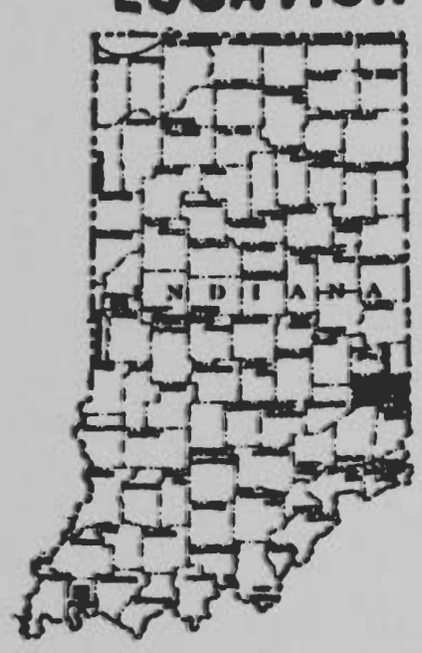
THE SOILS OF

FILE COPY

FRANKLIN COUNTY
INDIANA

NOVEMBER 1984

LOCATION



U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
MIDWEST NATIONAL TECHNICAL CENTER
LINCOLN, NEBRASKA

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
Midwest National Technical Center
Lincoln, Nebraska 68508-3866

Classification and Correlation of the Soils of Franklin County, Indiana

The field correlation and final field review for the soil survey of Franklin County, Indiana was held at Indianapolis, Indiana, February 27, March 2, and 5-7, 1984. Participating in the final field review were Jerry Shively, soil survey party leader, and William Hosteter, Indianapolis State Office. The data reviewed consisted of the first draft of the soil survey manuscript, correlation samples, field sheets, map unit notes, laboratory data, and SCS-SOILS-5 forms. Roger L. Haberman, soil correlator, MNTC, participated in the comprehensive field review on October 24-28, 1983. The field correlation was reviewed by Roger L. Haberman during April 1984. Several items were discussed with William Hosteter, soil specialist, Indiana. The final correlation decisions were based on the draft manuscript, field notes, copies of field sheets, laboratory data, SCS SOILS-6's, correlation samples, and the field correlation.

Headnote for the Detailed Soil Survey Legend

Map symbols consist of a combination of letters or of letters and numbers. The first capital letter is the initial one of the map unit name. The lowercase letter that follows separates map units having names that begin with the same letter, except that it does not separate sloping or eroded phases. The second capital letter indicates the class of slope. Symbols without a slope letter are for nearly level soils or miscellaneous areas. A final number of 2 indicates that the soil is moderately eroded and a number 3 indicates that the soil is severely eroded.

SOIL CORRELATION OF
FRANKLIN COUNTY, INDIANA

Field symbols	Field map unit name	Publication symbol	Approved map unit name
MeA	Martinsville loam, 0 to 2 percent slopes	AlA	Alvin sandy loam, 0 to 2 percent slopes
MeB2	Martinsville loam, 2 to 6 percent slopes, eroded	AlB	Alvin sandy loam, 2 to 6 percent slopes
AvA, AvB	Avonburg silt loam, 0 to 2 percent slopes,	AvA	Avonburg silt loam, 0 to 2 percent slopes
HkF	Hickory loam, 25 to 50 percent slopes	BnF	Bonnell loam, 25 to 50 percent slopes
HkC2	Hickory silt loam, 6 to 12 percent slopes, eroded	BoC2	Bonnell silt loam, 6 to 12 percent slopes, eroded
HkD2, BnD2	Hickory loam, 12 to 18 percent slopes, eroded	BoD2	Bonnell silt loam, 12 to 18 percent slopes, eroded
HkE2	Hickory loam, 18 to 25 percent slopes, eroded	BoE2	Bonnell silt loam, 18 to 25 percent slopes, eroded
HmD3	Hickory clay loam, 12 to 18 percent slopes, severely eroded	BpD3	Bonnell clay loam, 12 to 18 percent slopes, severely eroded
BnC3	Bonnell silty clay loam, 6 to 12 percent slopes, severely eroded	BrC3	Bonnell silty clay loam, 6 to 12 percent slopes, severely eroded
CbC2, CbD2, CbC3	Carmel silt loam, 6 to 12 percent slopes, eroded	CbC2	Carmel silt loam, 6 to 12 percent slopes, eroded
CkB2	Cincinnati silt loam, 2 to 6 percent slopes, eroded	CkB2	Cincinnati silt loam, 2 to 6 percent slopes, eroded

FRANKLIN CCUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
CkC2	Cincinnati silt loam, 6 to 12 percent slopes, eroded	CkC2	Cincinnati silt loam, 6 to 12 percent slopes, eroded
CkC3	Cincinnati silt loam, 6 to 12 percent slopes, severely eroded	CkC3	Cincinnati silt loam, 6 to 12 percent slopes, severely eroded
Cm	Cobbsfork silt loam	Cm	Cobbsfork silt loam
CoG, FaG	Corydon Variant silt loam, 18 to 50 percent slopes	CoG	Corydon silty clay loam, 18 to 50 percent slopes
Cy, Ra, Tr	Cyclone silt loam	Cy	Cyclone silt loam
Db	Dearborn loam, frequently flooded	Db	Dearborn loam, frequently flooded
EdE2, EdE3	Eden silty clay loam, 15 to 25 percent slopes, eroded	EbE2	Eden flaggy silty clay, 15 to 25 percent slopes, eroded
EdG	Eden silty clay loam, 25 to 60 percent slopes	EdG	Eden very flaggy silty clay, 25 to 60 percent slopes, stony
EeD2	Edenton silt loam, 12 to 18 percent slopes, eroded	EeD2	Edenton silt loam, 12 to 18 percent slopes, eroded
FoA	Fox loam, 0 to 2 percent slopes	ElA	Eldean loam, 0 to 2 percent slopes
FoB	Fox loam, 2 to 6 percent slopes	ElB	Eldean loam, 2 to 6 percent slopes
FcB, FcA	Fincastle silt loam, 1 to 3 percent slopes	FcB	Fincastle silt loam, 1 to 3 percent slopes

FRANKLIN CCUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
FfA, ReA	Fincastle-Reesville silt loams, 0 to 1 percent slopes	FfA	Fincastle-Reesville silt loams, 0 to 1 percent slopes
FxC3	Fox complex, 6 to 12 percent slopes, severely eroded	FxC3	Fox complex, 6 to 15 percent slopes, severely eroded
Gd	Gessie Variant loam, rarely flooded	Gd	Gessie loam, sandy substratum, rarely flooded
Ge	Gessie Variant loam, occasionally flooded	Ge	Gessie loam, sandy substratum, occasionally flooded
HeG	Hennepin loam, 25 to 60 percent slopes	HeG	Hennepin loam, 25 to 60 percent slopes
Ht	Holton silt loam, occasionally flooded	Ht	Holton silt loam, occasionally flooded
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	MmB2	Miami silt loam, 2 to 6 percent slopes, eroded
MmC2	Miami silt loam, 6 to 12 percent slopes, eroded	MmC2	Miami silt loam, 6 to 12 percent slopes, eroded
MmD2	Miami silt loam, 12 to 18 percent slopes, eroded	MmD2	Miami silt loam, 12 to 18 percent slopes, eroded
MoC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	MoC3	Miami clay loam, 6 to 12 percent slopes, severely eroded
MoD3	Miami clay loam, 12 to 18 percent slopes, severely eroded	MoD3	Miami clay loam, 12 to 18 percent slopes, severely eroded
Mr	Milford silty clay loam	Mr	Milford silty clay loam

FRANKLIN CCUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
Ss	Stonelick Variant sandy loam, rarely flooded	Mt	Moundhaven sandy loam, rarely flooded
St	Stonelick sandy loam, occasionally flooded	Mx	Moundhaven sandy loam, occasionally flooded
OcA	Ockley loam, 0 to 2 percent slopes	OcA	Ockley loam, 0 to 2 percent slopes
OcB2	Ockley loam, 2 to 6 percent slopes, eroded	OcB2	Ockley loam, 2 to 6 percent slopes, eroded
Lm, Lb, Ln	Lobdell silt loam, occasionally flooded	Og	Oldenburg silt loam, occasionally flooded
Pg	Pits, gravel	Pg	Pits, gravel
Ph	Pits, quarries	Ph	Pits, quarries
PrC2	Princeton fine sandy loam, 4 to 12 percent slopes, eroded	PrC	Princeton fine sandy loam, 4 to 12 percent slopes
RkF	Rodman gravelly sandy loam, 35 to 60 percent slopes	RkF	Rodman gravelly coarse sandy loam, 35 to 60 percent slopes
Rm, Rn	Ross silt loam, rarely flooded	Rm	Ross silt loam, rarely flooded
RsA	Rossmoyne silt loam, 0 to 2 percent slopes	RsA	Rossmoyne silt loam, 0 to 2 percent slopes
RsB2	Rossmoyne silt loam, 2 to 6 percent slopes, eroded	RsB2	Rossmoyne silt loam, 2 to 6 percent slopes, eroded
RuB2	Russell silt loam, 1 to 6 percent slopes, eroded	RuB2	Russell silt loam, 1 to 6 percent slopes, eroded

FRANKLIN CCUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publi-cation symbol	Approved map unit name
RvA	Russell silt loam, bedrock substratum, 0 to 2 percent slopes	RvA	Russell silt loam, bedrock substratum, 0 to 2 percent slopes
RvB	Russell silt loam, bedrock substratum, 2 to 6 percent slopes	RvB	Russell silt loam, bedrock substratum, 2 to 6 percent slopes
DaB, CaB	Sidell silt loam, 1 to 4 percent slopes	SdB	Sidell silt loam, 1 to 4 percent slopes
UaB, UnB2, UnA	Uniontown silt loam, moderately wet, 2 to 8 percent	UaB	Uniontown silt loam, moderately wet, 2 to 8 percent slopes
UnD2, UnC2, UnE2	Uniontown silt loam, 15 to 25 percent slopes, eroded	UnD2	Uniontown silt loam, 15 to 25 percent slopes, eroded
WeB2, WeC2, WeC3	Weisburg silt loam, 2 to 6 percent slopes, eroded	WeB2	Weisburg silt loam, 2 to 6 percent slopes, eroded
WmB	Williamstcwn silt loam, 1 to 4 percent slopes	WmB	Williamstown silt loam, 1 to 4 percent slopes
Wn, Ch	Wirt loam, occasionally flooded	Wn	Wirt loam, occasionally flooded
WoB	Woolper silty clay loam, 1 to 6 percent slopes	WoB	Woolper silty clay loam, 1 to 6 percent slopes
WyB, WyB2, WyA	Wynn silt loam, 1 to 6 percent slopes	WrB	Wynn silt loam, 1 to 6 percent slopes
WyC2	Wynn silt loam, 6 to 12 percent slopes, eroded	WrC2	Wynn silt loam, 6 to 12 percent slopes, eroded

FRANKLIN COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
WyC3	Wynn silt loam, 6 to 12 percent slopes, severely eroded	WyC3	Wynn silty clay loam, 6 to 12 percent slopes, severely eroded
XnA	Xenia silt loam, 0 to 2 percent slopes	XnA	Xenia silt loam, 0 to 2 percent slopes
XnB2	Xenia silt loam, 2 to 6 percent slopes, eroded	XnB2	Xenia silt loam, 2 to 6 percent slopes, eroded

Series Established by This Correlation:

Moundhaven (type location in Franklin County, Indiana)
Oldenburg (type location in Franklin County, Indiana)

Series Dropped or Made Inactive:

None

Certification Statement:
The state soil scientist certifies that:

1. Mapping was completed in July 1983.

2. The detailed maps and general soils map are joined with adjacent counties and that all discrepancies have been noted and are on file at the Indiana State Office and in the MNTC. In the general soil map joins there is generally at least one commonly named soil or the areas coming in from adjoining counties are too small to extend into Franklin County as they would be of very minor extent there. On the detailed joins, in general, where names differ, use and management are similar.

3. Interpretations have been coordinated.

4. Typical pedons are in soil areas using the reference name. The legal descriptions of the location of the typical pedons are correct.

Verification of Exact Cooperator Names:
The following will be on the front of the publication:

United States Department of Agriculture
Soil Conservation Service
in cooperation with
Purdue University Agricultural Experiment Station
and
Indiana Department of Natural Resources
Soil and Water Conservation Committee

The citation in the box on the inside of the front cover will read:

"This survey was made cooperatively by the Soil Conservation Service, Purdue University Agricultural Experiment Station, and the Indiana Department of Natural Resources, Soil and Water Conservation Committee. It is a part of the technical assistance furnished to the Franklin County Soil and Water Conservation District. Financial assistance was made available by the Franklin County Board of County Commissioners."

Disposition of Original Atlas Field Sheets:
The original atlas field sheets for Franklin County will be retained by the Indiana State Office, and will be used in the map compilation and finishing procedures. Copies have been made for fire protection purposes. The state office at Indianapolis will prepare the atlas sheets for publication by February 1986.

Prior Soil Survey Publications:
A reference to the 1950 soil survey of Franklin County, Indiana, will be made in the introduction of this publication. An example of how this might be done follows:

> The first soil survey of Franklin County was made in 1950 (reference citation). This survey updates the first survey and provides additional information and larger maps that show the soils in greater detail.
>
> > Soil survey of Franklin County, Indiana, O.C. Rogers, in charge, and A. J. Vessel, and G. M. Brune, U.S. Department of Agriculture, and T. E. Barnes, Purdue University Agricultural Experiement Station, 128 pp., illus., 1950.

Instructions for Map Finishing:
The conventional and special symbols used in this survey are listed on the attached SCS-37A. These are the only symbols that will be shown on the published maps. The maps will be finished using the "Guide for Soil Map Finishing." July 1976.

SCS-SOILS-37A
3-75

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Soil Survey Area: Franklin County
State: Indiana

Date: 10/83

CULTURAL FEATURES

BOUNDARIES

National, state, or province

County or parish

Minor civil division

Reservation (national forest or park, state forest or park, and large airport)

Field sheet matchline & neatline

AD HOC BOUNDARY (label)

Small airport, airfield, park, oilfield, cemetery, or flood pool

STATE COORDINATE TICK
1 890 000 FEET

LAND DIVISION CORNERS (sections and land grants)

ROADS

Divided (median shown if scale permits)

County, farm or ranch

ROAD EMBLEMS & DESIGNATIONS

Interstate 66

Federal 287

State 52

RAILROAD

DAMS

Large (to scale).

Medium or small

PITS

Gravel pit

Mine or quarry

CULTURAL FEATURES (cont.)

MISCELLANEOUS CULTURAL FEATURES

Farmstead, house (omit in urban areas)

Church

School

WATER FEATURES

DRAINAGE

Perennial, double line

Perennial, single line

Intermittent

Drainage end

Canals or ditches

Drainage and/or irrigation

LAKES, PONDS AND RESERVOIRS

Perennial water w

MISCELLANEOUS WATER FEATURES

Wet spot

SPECIAL SYMBOLS FOR SOIL SURVEY

SOIL DELINEATIONS AND SOIL SYMBOLS

ESCARPMENTS CeA FoB2

Bedrock (points down slope)

Other than bedrock (points down slope)

SHORT STEEP SLOPE

GULLY

DEPRESSION OR SINK

MISCELLANEOUS

Gravelly spot

Rock outcrop (includes sandstone and shale)

Sandy spot

Severely eroded spot

RECOMMENDED AD HOC SOIL SYMBOLS

Less than 5 acres with bedrock at 20 to 60 inches

Landfill—each symbol represents 5 acres or less. The landfill will be outlined with a dashed line on the field sheets.

Cut & Fill—each symbol represents 5 acres or less

SOIL SURVEY FRANKLIN COUNTY, INDIANA

PRIME FARMLAND

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

Map symbol	Soil name
AlA	Alvin sandy loam, 0 to 2 percent slopes
AlB	Alvin sandy loam, 2 to 6 percent slopes
AvA	Avonburg silt loam, 0 to 2 percent slopes (where drained)
CkB2	Cincinnati silt loam, 2 to 6 percent slopes, eroded
Cm	Cobbsfork silt loam (where drained)
Cy	Cyclone silt loam (where drained)
ElA	Eldean loam, 0 to 2 percent slopes
ElB	Eldean loam, 2 to 6 percent slopes
FcB	Fincastle silt loam, 1 to 3 percent slopes (where drained)
FfA	Fincastle-Reesville silt loams, 0 to 1 percent slopes (where drained)
Gd	Gessie loam, sandy substratum, rarely flooded
Ge	Gessie loam, sandy substratum, occasionally flooded
Ht	Holton silt loam, occasionally flooded (where drained)
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded
Mr	Milford silty clay loam (where drained)
OcA	Ockley loam, 0 to 2 percent slopes
OcB2	Ockley loam, 2 to 6 percent slopes, eroded
Og	Oldenburg silt loam, occasionally flooded
Rm	Ross silt loam, rarely flooded
RsA	Rossmoyne silt loam, 0 to 2 percent slopes
RsB2	Rossmoyne silt loam, 2 to 6 percent slopes, eroded
RuB2	Russell silt loam, 1 to 6 percent slopes, eroded
RvA	Russell silt loam, bedrock substratum, 0 to 2 percent slopes
RvB	Russell silt loam, bedrcck substratum, 2 to 6 percent slopes
SdB	Sidell silt loam, 1 to 4 percent slopes
UaB	Uniontown silt loam, moderately wet, 2 to 8 percent slopes
WeB2	Weisburg silt loam, 2 tc 6 percent slopes, eroded
WmB	Williamstown silt loam, 1 to 4 percent slopes
Wn	Wirt loam, occasionally flooded
WoB	Woolper silty clay loam, 1 to 6 percent slopes
WrB	Wynn silt loam, 1 to 6 percent slopes

PRIME FARMLAND--Continued

Map symbol	Soil name
XnA	Xenia silt loam, 0 to 2 percent slopes
XnB2	Xenia silt loam, 2 to 6 percent slopes, eroded

Approved: November 1, 1984

Rodney F. Harner

RODNEY F. HARNER
Head, Soils Staff
Midwest NTC

CONVERSION LEGEND FOR FRANKLIN COUNTY, INDIANA

Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol
AvA	AvA	MeA	AlA	WyB2	WrB		
AvB	AvA	MeB2	AlB	WyC2	WrC2		
BnC3	BrC3	MmB2	MmB2	WyC3	WyC3		
BnD2	BoD2	MmC2	MmC2	XnA	XnA		
CaB	SdB	MmD2	MmD2	XnB2	XnB2		
CbC2	CbC2	MoC3	MoC3				
CbC3	CbC2	MoD3	MoD3				
CbD2	CbC2	Mr	Mr				
Ch	Wn	OcA	OcA				
CkB2	CkB2	OcB2	OcB2				
CkC2	CkC2	Pg	Pg				
CkC3	CkC3	Ph	Ph				
Cm	Cm	PrC2	PrC				
CoG	CoG	Ra	Cy				
Cy	Cy	ReA	FfA				
DaB	SdB	RkF	RkF				
Db	Db	Rm	Rm				
EdE2	EbE2	Rn	Rm				
EdE3	EbE2	RsA	RsA				
EdG	EdG	RsB2	RsB2				
EeD2	EeD2	RuB2	RuB2				
FaG	CoG	RvA	RvA				
FcA	FcB	RvB	RvB				
FcB	FcB	Ss	Mt				
FfA	FfA	St	Mx				
FoA	ElA	Tr	Cy				
FoB	ElB	UaB	UaB				
FxC3	FxC3	UnA	UaB				
Gd	Gd	UnB2	UaB				
Ge	Ge	UnC2	UnD2				
HeG	HeG	UnD2	UnD2				
HkC2	BoC2	UnE2	UnD2				
HkD2	BoD2	WeB2	WeB2				
HkE2	BoE2	WeC2	WeB2				
HkF	BnF	WeC3	WeB2				
HmD3	BpD3	WmB	WmB				
Ht	Ht	Wn	Wn				
Lb	Og	WoB	WoB				

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

1. Data from the Purdue Laboratory with SCS-SOILS-8 forms.

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Avonburg	S81IN47-1	AvA	Avonburg[1/]
Carmel	S81IN47-3	CbC2	Carmel[1/]
Cincinnati	S81IN47-2	CkB2	Cincinnati; fragipan slightly thicker than maximum for series; and the glacial till lacks coarse fragments
Clermont	S81IN47-4	Cm	Cobbsfork[1/] slightly more clay in lower B horizon than allowed for the series; and the subsoil includes extremely acid
Corydon Variant	S81IN47-18	CoG	Corydon taxadjunct[1/] Loamy, mixed, mesic Lithic Hapludoll
Eden	S81IN47-12	EdG	Eden taxadjunct[1/] Fine, mixed, mesic Typic Eutrochrept
Edenton	S81IN47-17	EeD2	Edenton taxadjunct[1/] Fine-loamy, mixed, mesic Typic Hapludalf
Fox	S81IN47-13	E1A	Eldean[1/]
Gessie Variant	S81IN47-5	Ge	Gessie taxadjunct[1/] Fine-silty, mixed, (calcareous) mesic Typic Udifluvent
Hickory	S81IN47-6	BoE2	Bonnell[1/]; slightly thinner Bt horizon and less clay in the C horizon than recognized for the series
Martinsville	S81IN47-16	A1A	Alvin[1/]; less acid in the Bt and having free carbonates higher in the profile than recognized for the series

Miami	S81IN47-14	MmB2	Miami[1/]
Princeton	S82IN47-7	PrC	Princeton[1/]
Rossmoyne	S81IN47-8	RsB2	Rossmoyne[1/]; partly formed in silty glacial drift not described in official series. Also more acid in some part of the solum than recognized for the series.
Russell	S81IN47-9	RuB2	Russell
Woolper	S82IN47-6	WoB	Woolper taxadjunct[1/] Fine, mixed, mesic Typic Hapludoll
Wynn	S81IN47-10	WrB2	Wynn taxadjunct; Fine-silty, mixed, mesic Typic Hapludalf

2. Data from the National Soil Survey Laboratory with SCS-SOILS-8 forms.

Lobdell Variant	S83IN-47-001	Og	Oldenburg[1/ 2/]
Stonelick	S82-IN-047-010	Mx	Moundhaven[1/ 2/]

[1/] Representative pedon for the series in Franklin County, Indiana
[2/] Typical pedon for the official series description.

Notes to Accompany
Classification and Correlation
of the Soils of
Franklin County, Indiana

by
William Hosteter and Roger L. Haberman

ALVIN SERIES
These soils are typically less acid and have free carbonates at shallower depths than recognized for the series. They are not considered to be taxadjuncts.

Eroded is deleted from the name of the mapping unit A1B. There is no sign of the soil being eroded in the mapping unit description. In addition, they have a thicker solum than the Alvin soils on slopes of less than 2 percent. Eroded had not been listed as a critical phase on the SCS-SOILS-6 form.

AVONBURG SERIES
These soils formed in 40 to 48 inches of silty loess and the underlying silty drift of unknown origin. They are more acid in the subsoil than recognized for the series. They are not taxadjuncts.

BONNELL SERIES
These soils typically have thinner Bt horizons and less clay in the C horizon than recognized for the series. In addition, the soil in mapping unit BnF and BnD3 have sola less than 50 inches thick. The soils are not taxadjuncts.

CINCINNATI SERIES
The soils in mapping unit CkB2 and CkC2 have a slightly thicker loess mantle than recognized for the series. All units have part of the subsoil formed in gritty silts of unknown origin. In addition, the glacial till in all units lack coarse fragments. The soils are not taxadjuncts.

COBBSFORK SERIES
These soils have a slightly lower reaction in parts of the Bt horizon than is allowed in the range for the series. In addition, the lower B horizons contain more clay than recognized for the series. The soils are not taxadjuncts.

CORYDON SERIES
The Corydon soils are taxadjuncts to the series in that they are less clayey and lack an argillic horizon. They are loamy, mixed, mesic Lithic Hapludolls.

EDEN SERIES
The Eden soils are taxadjuncts to the series in that they lack an argillic horizon. The soils are fine, mixed, mesic Typic Eutrochrepts.

EDENTON SERIES
The Edenton soils are taxadjuncts to the series in that they are less clayey. The soils are fine-loamy, mixed, mesic Typic Hapludalfs.

FINCASTLE SERIES
These soils are slightly less acid in the Bt horizon than recognized for the series, however, the soils are not considered taxadjuncts.

FOX SERIES
The C horizon includes gravelly loamy coarse sand in the upper part.

GESSIE SERIES
The Gessie soils in mapping unit Ge are taxadjuncts to the series in that they contain less sand. The soils are fine-silty, mixed (calcareous), mesic Typic Udifluvents.

MIAMI SERIES
The Miami soils in mapping unit MoD3 have slightly thinner solums than recognized for the series, however, the soils are not considered to be taxadjuncts.

MOUNDHAVEN SERIES
The Moundhaven series is established by this correlation. Approximately 2,700 acres are in this survey area.

OCKLEY SERIES
These soils are less acid in the upper Bt horizon than recognized for the series, however, the soils are not considered taxadjuncts.

OLDENBURG SERIES
The Oldenburg series is established by this correlation. Approximately 1,900 acres are in this survey area. These soils have been correlated as taxadjuncts to the Lobdell series in some survey areas.

REESVILLE SERIES
These soils are less acid in the E and upper Bt horizon than recognized for the series. In addition, they have chroma of 6 in the Bt and C horizon. The soils are not considered taxadjuncts.

ROSSMOYNE SERIES
These soils are more acid in some horizons, lack mottles in the Bx horizon, and have formed partially in silty glacial drift, all of which are outside the series. The soils are not considered to be taxadjuncts.

UNIONTOWN SERIES
The soils in mapping unit UaB have a thicker solum than recognized for the series. In addition, the soils have chroma of 3 in the upper Bt horizon. They are not taxadjuncts.

WEISBURG SERIES
These soils have slightly thinner sola and less depth to bedrock than recognized for the series. In addition, they are mildly alkaline and calcareous in the lower solum. They are not considered to be taxadjuncts.

WILLIAMSTOWN SERIES
These soils have a slightly thinner Bt horizon than recognized for the series.

WIRT SERIES
These soils lack coarse fragments below depths of 40 inches.

WOOLPER SERIES
The Woolper soils are taxadjuncts to the series in that they lack an argillic horizon. The soils are fine, mixed, mesic Typic Hapludolls.

WYNN SERIES

The Wynn soils in mapping unit WrB are taxadjuncts to the series in that they are less clayey. The soils are fine-silty, mixed, mesic Typic Hapludalfs.

SOIL SURVEY FRANKLIN COUNTY, INDIANA

CLASSIFICATION OF THE SOILS

(An asterisk in the first column indicates a taxadjunct to the series. See notes for a description of those characteristics of this taxadjunct that are outside the range of the series)

Soil name	Family or higher taxonomic class
Alvin	Coarse-loamy, mixed, mesic Typic Hapludalfs
Avonburg	Fine-silty, mixed, mesic Aeric Fragiaqualfs
Bonnell	Fine, mixed, mesic Typic Hapludalfs
Carmel	Fine, vermiculitic, mesic Typic Hapludalfs
Cincinnati	Fine-silty, mixed, mesic Typic Fragiudalfs
Cobbsfork	Fine-silty, mixed, mesic Typic Ochraqualfs
*Corydon	Clayey, mixed, mesic Lithic Argiudolls
Cyclone	Fine-silty, mixed, mesic Typic Argiaquolls
Dearborn	Loamy-skeletal, mixed, mesic Fluventic Hapludolls
*Eden	Fine, mixed, mesic Typic Hapludalfs
*Edenton	Fine, mixed, mesic Typic Hapludalfs
Eldean	Fine, mixed, mesic Typic Hapludalfs
Fincastle	Fine-silty, mixed, mesic Aeric Ochraqualfs
Fox	Fine-loamy over sandy or sandy-skeletal, mixed, mesic Typic Hapludalfs
*Gessie	Fine-loamy, mixed (calcareous), mesic Typic Udifluvents
Hennepin	Fine-loamy, mixed, mesic Typic Eutrochrepts
Holton	Coarse-loamy, mixed, nonacid, mesic Aeric Fluvaquents
Miami	Fine-loamy, mixed, mesic Typic Hapludalfs
Milford	Fine, mixed, mesic Typic Haplaquolls
Moundhaven	Sandy, mixed, mesic Typic Udifluvents
Ockley	Fine-loamy, mixed, mesic Typic Hapludalfs
Oldenburg	Coarse-loamy, mixed, nonacid, mesic Aquic Udifluvents
Princeton	Fine-loamy, mixed, mesic Typic Hapludalfs
Reesville	Fine-silty, mixed, mesic Aeric Ochraqualfs
Rodman	Sandy-skeletal, mixed, mesic Typic Hapludolls
Ross	Fine-loamy, mixed, mesic Cumulic Hapludolls
Rossmoyne	Fine-silty, mixed, mesic Aquic Fragiudalfs
Russell	Fine-silty, mixed, mesic Typic Hapludalfs
Sidell	Fine-silty, mixed, mesic Typic Argiudolls
Uniontown	Fine-silty, mixed, mesic Typic Hapludalfs
Weisburg	Fine-silty, mixed, mesic Typic Fragiudalfs
Williamstown	Fine-loamy, mixed, mesic Aquic Hapludalfs

CLASSIFICATION OF THE SOILS--Continued

Soil name	Family or higher taxonomic class
Wirt	Coarse-loamy, mixed, nonacid, mesic Typic Udifluvents
*Woolper	Fine, mixed, mesic Typic Argiudolls
*Wynn	Fine, mixed, mesic Typic Hapludalfs
Xenia	Fine-silty, mixed, mesic Aquic Hapludalfs